

IN THE SPECIFICATION

Please replace the paragraph at page 7, line 26 to page 8, line 14, with the following rewritten paragraph:

In accordance with a fifth aspect of the present invention, there is provided a semiconductor processing device for processing a semiconductor while providing a processing gas into a processing space accommodating a heated substrate to be processed, including: a processing chamber forming the processing space and capable of being pumped in vacuum; a susceptor for mounting the substrate in the processing chamber; a heater for heating the substrate on the susceptor; a shower head, installed at a ceiling of the processing chamber, for providing the processing gas; a heat ray introducing ~~draining~~ passage vertically formed through the shower head; a radiation thermometer facing through a measurement window at an upper opening part of the heat ray introducing ~~draining~~ passage; and an inert gas introducing passage for introducing an inert gas into the heat ray introducing ~~draining~~ passage.

Please replace the paragraph at page 8, lines 15-24, with the following rewritten paragraph:

In the device of the fifth aspect, it may be possible that the inert gas is discharged from a lower end opening of the heat ray introducing ~~draining~~ passage to be diffused while the gas is falling toward outside of the susceptor; and the heat ray introducing ~~draining~~ passage is spaced apart from a center of the shower head such that a position of a main gas stream of the inert gas discharged therefrom falls outside an outer circumference of the substrate on the susceptor when the gas stream reaches an identical horizontal level to that of an upper surface of the susceptor.

Please replace the paragraph at page 40, lines 17-25, with the following rewritten paragraph:

In this embodiment, the radiation thermometer 110 of a type not having the light introducing rod 68 (see Figs. 9 and 13) is used as the radiation thermometer attached to the shower head 12. Namely, a heat ray introducing ~~draining~~ passage 112, e.g., with a diameter of approximately 13 mm, is formed for it to vertically pass through around a substantially central part of the shower head 12. The heat ray introducing ~~draining~~ passage 112 is separated from the head space for source gas 60A and the head space for assist gas 60B.

Please replace the paragraph at page 48, lines 19-25, with the following rewritten paragraph:

In each of the devices as shown in Figs. 13, 14 and 16, the heat ray introducing passage 112 is installed to make it vertically pass through an approximately central part of the shower head 12. The temperature of an approximately central part of the wafer W is measured by using the radiation thermometer 110 installed on the heat ray introducing ~~draining~~ passage 112.

Please replace the paragraph at page 49, line 16 to page 50, line 8, with the following amended paragraph:

In order to prevent a film from being adhered to the inner surface of the measurement window 116, an inert gas, e.g., Ar gas, is introduced through the inert gas introducing passage 118, and then discharged downward from a lower end opening 112A of the heat ray introducing ~~draining~~ passage 112. Because the vacuum evacuation is carried out uniformly around the outer circumferential part of the susceptor 26, the Ar gas is diffused while the gas is falling toward the outside of the susceptor 16. As shown in Fig. 19, in case an eccentric

distance L1 is set to be only several centimeters, a main gas stream 130 of the Ar gas directly falls on a partial area 132 on the surface of the wafer W. It was found that due to the above a thickness of the deposited film in the circular area 132 having a diameter of several centimeters becomes thinner than that in the remaining area on the surface of the wafer W. A projected location of the lower end opening 112A of the heat ray introducing passage 112 is also depicted for reference in Fig. 19.